Mediprene® A2 500350M

Styrene Ethylene Butylene Styrene Block Copolymer

ELASTO

Message:

Overmoulding is a powerful technique that allows the production of ? nished parts in soft and hard material combinations without trimming or assembly. It offers many design and product advantages, allowing designers to differentiate products while meeting important user and patient demands, including soft-touch and cushioning for greater comfort and non-slip surfaces with improved grip for safety.
Special features
Unfilled
PVC, silicone & latex free
35 to 65 Shore A
Medically approved raw materials
Production site accredited to ISO 13485
Sterilizable with gamma, EtO and steam
Flexibility over broad temperature range
Easy to colour
Resistant to many fluids used in the health care environment
Short cycle times
Adhesion to a variety of substrates
The standard Mediprene® series bonds very well to polyole? ns like polyethylene (PE) and polypropylene (PP). However, in several medical applications transparent engineering plastics like ABS, PC, PETG and SMMA (and their blends) are utilised. The Mediprene® A2 series has been developed to address demands for medical grade TPEs that bond well to these substrates.
Regulatory compliance
Representative Mediprene® grades have passed cytotoxicity tests according to ISO 10993-5 and are compliant with USP Class VI.
Mediprene® TPE materials are PVC, silicone and latex free, making them allergen free and a viable alternative to PVC based compounds.
Applications
Potential applications for the Mediprene® A series include; seals, membranes, closures, friction grips, soft-touch handles.
Mediprene® TPEs provide enhanced sealing capabilities in fluid environments.

General Information	
Features	Bondability
	Ethylene Oxide Sterilizable
	Fast Molding Cycle
	Good Abrasion Resistance
	Good Colorability
	Good Flexibility
	Radiation Sterilizable
	Soft
	Steam Sterilizable
Uses	Bonding
	Closures
	Flexible Grips
	Handles
	Medical/Healthcare Applications
	Membranes
	Overmolding
	Seals

Agency Ratings	ISO 10993 Part 5 USP Class VI
Appearance	Natural Color
Forms	Pellets
Processing Method	Coextrusion Extrusion Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.940	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	30	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 4.00 mm, Injection Molded)	35		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength			ASTM D638
--	3.00	MPa	
100% Strain	1.00	MPa	
300% Strain	2.00	MPa	
Tensile Elongation (Break)	550	%	ASTM D638
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tear Strength	16.0	kN/m	ASTM D624
Thermal	**Nominal Value**	**Unit**	
Service Temperature [1]	-50 to 125	°C	
Peel Force [2] (2.50 mm)	2.5	kN/m	ASTM D903
Injection	**Nominal Value**	**Unit**	
Rear Temperature	210 to 250	°C	
Middle Temperature	210 to 250	°C	
Front Temperature	210 to 250	°C	
Mold Temperature	30.0 to 60.0	°C	
Extrusion	**Nominal Value**	**Unit**	
Cylinder Zone 1 Temp.	210 to 250	°C	
Cylinder Zone 2 Temp.	210 to 250	°C	
Cylinder Zone 3 Temp.	210 to 250	°C	
Cylinder Zone 4 Temp.	210 to 250	°C	
Cylinder Zone 5 Temp.	210 to 250	°C	
NOTE			
1.	unstressed material		

2.	90° peel tests conducted at 100 mm/min with Mediprene® A2 grade (2.5 mm thickness, 25 mm width) overmoulded onto ABS (Terlux 2802HD).

Recommended distributors for this material

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